## **IN THE SPECIFICATION**

Please amend the specification as shown below, by entering the following replacement paragraphs marked up to show changes made relative to the immediate prior version, wherein strikethrough indicates material to be deleted and underlining indicates material to be added.

Please replace the paragraphs currently found in the Description of Drawings on page 9, lines 7-22 with the following replacement paragraphs, marked up to show changes made relative to the immediate prior version.

- **FIG. 14** are nucleotide sequences of rat GIP (SEQ. ID. NO. 18) and mouse chromagranin A gene promoter regions (SEQ. ID. NO. 5).
- **FIG. 15** are nucleotide sequences of promoter and exon 1 of mouse secretogranin II (Accession no. AF037451) (SEQ. ID. NO. 6) and a 5' portion of mouse glucokinase gene promoter (Accession no. U93275) (SEQ. ID. NO. 7).
- FIG. 16 are nucleotide sequences of a 3' portion of mouse glucokinase gene promoter (Accession no. U93275), human adenosine deaminase gene promoter region (Accession no. X02189) (SEQ. ID. NO. 8); and human pre-proinsulin amino adic sequence (SEQ. ID. NO. 9), and 60 bp of a 5' region of pre-proinsulin (SEQ. ID. NO. 10).
- FIG. 17 are nucleotide sequences of the remaining 3' portion of human pre-proinsulin (SEQ. ID. NO. 12) and a 5' portion of the human leptin gene cDNA (SEQ. ID. NO. 11).

- FIG. 18 are nucleotide sequences of the remaining 3' portion of human leptin (SEQ. ID. NO. 14), human CCK amino acid (SEQ. ID. NO. 13) and nucleotide sequences and 60 bp of rat CCK promoter (SEQ. ID. NO. 15).
- FIG. 19 are nucleotide sequences of the remaining 3' portion of rat CCK promoter and amino acid (SEQ. ID. NO. 16) and nucleotide sequences of human growth hormone (SEQ. ID. NO. 17).
- **FIG. 20** is the sequence for the rat GIP promoter from −1 to −1894 bp (SEQ. ID. NO.19).

Please replace the current paragraph found in the Detailed Description on page 46, line 23 to page 47, line 2, with the following replacement paragraph marked up to show changes made relative to the immediate prior version.

To confirm insulin production in duodenum, RT-PCT analysis for insulin mRNA was performed. In brief, human proinsulin specfic, forward 5'
CCAGCCGCAGCCTTTGTGA-3' (SEQ. ID. NO. 1) and reverse 5'GGTACAGCATTGTTCCACAATG-3' (SEQ. ID. NO. 2); mouse proinsulin specific, forward 5'-ACCACCAGCCCTAAGTGAT-3' (SEQ. ID. NO. 3) and reverse 5'CTAGTTGCAGTAGTTCTCCAGC-3' (SEQ. ID. NO. 4) primer were used-were. PCR conditions were as follows: denaturation at 94°C for 1 min, annealing at 50°C for 1 min and extension at 72°C for 1 min for 45 cycles. PCR products were analyzed on a 2% agarose gel and visualized by ethidium bromide staining. The human- and mouse-specific primer sets yielded 350 bp and 396 bp products, respectively.